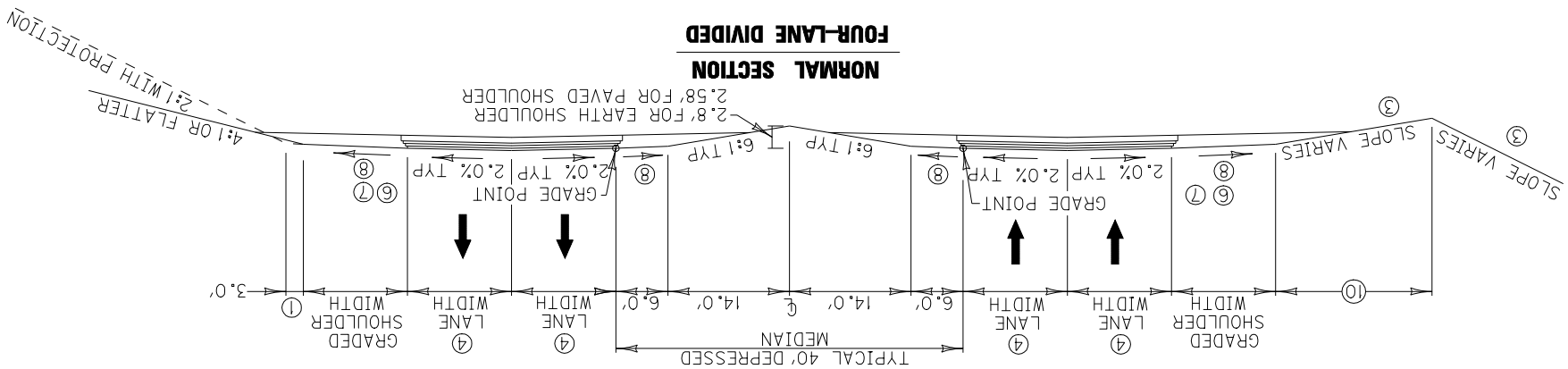
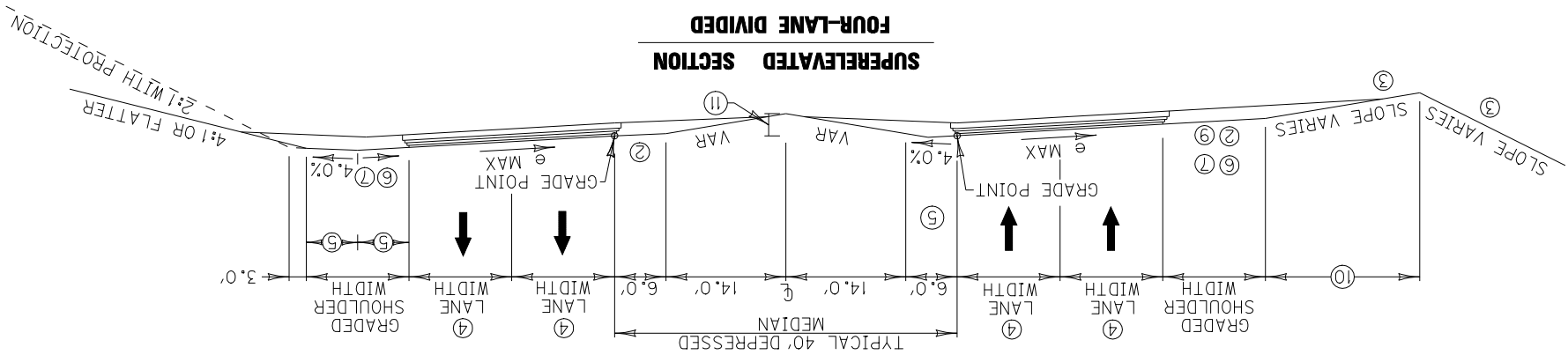


TYPICAL SECTIONS

NORMAL SECTION
FOUR-LANE DIVIDED



SUPERELEVATED SECTION
FOUR-LANE DIVIDED



- ① SHOULDERS SHALL BE WIDENED 3 FEET WHERE GUARDRAIL IS TO BE INSTALLED.
- ② SUPERELEVATED SHOULDERS - CONSTRUCT TO STANDARD SUPERELEVATION, EXCEPT NOT FLATTER THAN THE SLOPE INDICATED FOR NORMAL SECTION.
- ③ REFER TO AASHTO'S "ROADSIDE DESIGN GUIDE", CURRENT EDITION, FOR SPECIFIC SLOPE GUIDANCE.
- ④ REFER TO AASHTO'S "A POLICY ON GEOMETRIC DESIGN OF HIGHWAY AND STREETS", CURRENT EDITION, FOR SUGGESTED LANE WIDTHS OF THE VARIOUS ROADWAY CLASSIFICATIONS.
- ⑤ IF THE SHOULDER WIDTH IS GREATER THAN 4 FEET, A PORTION OF THE OUTSIDE SHOULDER, THE SHOULDER ON THE HIGH SIDE, IS NOT SUPERELEVATED TO MATCH THE MAINLINE RATE. THE NON-SUPERELEVATED SHOULDER REMAINS SLOPED AWAY FROM THE ROADWAY. FOR SHOULDER WIDTHS GREATER THAN 4 FEET AND LESS THAN OR EQUAL TO 6 FEET, THE NON-SUPERELEVATED SHOULDER WIDTH WILL BE 2 FEET. FOR SHOULDER WIDTHS GREATER THAN 6 FEET, THE SHOULDER "BREAK" IS TO OCCUR AT THE MIDPOINT OF THE SHOULDER WIDTH. THIS REQUIREMENT MAY NOT HAVE APPLICATION TO INSIDE SHOULDERS OF MEDIAN SECTIONS AND MULTILANE FACILITIES. FOR THE "ROLL-OVER" BETWEEN SUPERABLE AND NONSUPERABLE SHOULDER, THE ALGEBRAIC DIFFERENCE IN RATE OF CROSS-SLOPE IS NOT TO EXCEED 12.0 PERCENT.
- ⑥ USABLE SHOULDER - THE CLEAR AREA BETWEEN THE TRAVELED WAY AND ANY BARRIER OR BREAK POINT. TYPICALLY THIS DISTANCE IS THE SAME AS THE GRADED SHOULDER WIDTH.
- ⑦ SHOULDER MAY BE PAVED TO WITHIN 1 FOOT OF THE SLOPE BREAK OR TO THE FACE OF THE BARRIER.
- ⑧ NORMAL SHOULDER CROSS SLOPE: EARTH = 8%, PAVED = 4%
- ⑨ AFTER THE NORMAL SHOULDER CROSS-SLOPE IS EXCEEDED, THE FULL WIDTH OF THE INSIDE SHOULDER IS ROTATED TO MATCH THE ROADWAY SUPERELEVATION.
- ⑩ WIDTH VARIES PER DRAINAGE/"ROADSIDE DESIGN GUIDE" REQUIREMENTS.
- ⑪ VERTICAL DISTANCE BETWEEN GRADE POINT AND NORMAL SECTION.